



Influence of Climate Change on Mental Health - A Review

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Abstract

2014 was declared by the US Meteorological Department as the hottest year in the world. Climate change is a worldwide problem that affects both physical health and mental health. The rise in temperature leads to anger and droughts due to climate change can lead to farmers' suicide. Increased problems of climate change can lead to anxiety and depression. A decrease in agricultural practices causes an economic burden to the families which causes mental health problems like anxiety and post-traumatic stress disorder. There is a growing global view of the need to reduce carbon emissions per person over the coming decades and bridge the inequalities between rich and poor countries. The plantation of trees and saplings can reduce stress and promote a sense of well-being. This article discusses the influence of climate change on mental health and measures taken to mitigate the same.

Keywords: Climate Change; Public Health; Temperature

Introduction

Climate Change is considered the public health problem of the 21st century. According to United Nations Framework Convention on Climate Change (UNFCCC), Climate Change is defined as a change in climate that is associated directly or indirectly with human tasks that modify the configuration of the global atmosphere along with natural climate flexibility discovered in different periods [1].

Climate Change is considered the public health problem of the 21st century. In the last 130 years, the world has warmed by approximately 0.85 degrees Celsius [2].

Human Activities have changed the atmospheric configuration and these lead to an increase in greenhouse gases leading to Global warming. These effects have been associated with mental health [1]. The Intergovernmental Panel on Climate Change acknowledges mental health challenges to climate change as a burden on environmental health [4].

Impact of climate change on mental health

Increase in temperature

An increase in heat changes the mood and makes humans aggressive in behavior. Heatwaves are often linked with behavioral problems. It's often noticed that suicides happen when there is a temperature rise [5]. Australian studies have significantly shown that Mental disorders admission rates have significantly increased when there was a temperature rise [6].

Climate-related disasters

Climate-related disasters like earthquakes are often linked with mental distress disorders like anxiety and depression. People who are exposed to challenging situations often experience the risk of post-traumatic stress disorder (PTSD) [7].

Droughts and farmer's suicide

Climate change globally is going to aggravate droughts in upcoming years [8]. An association has been found between farmers' suicide and droughts. When there are droughts, there is

crop failure and this leads to the suicide of the farmer. This trend is seen in developing countries like India where farmers suicide due to debt which is caused due to droughts [9].

Economic changes

Agriculture is hugely affected due to climate change. A decrease in Agriculture leads to less production of goods in agricultural industries which leads to the loss of jobs of the laborers working in the industries. This leads to economic hardships which can cause a rise in mental health problems [10].

Social capital along with community activities becomes challenging during economic problems [11,12]. Constraints also have a poor effect on healthcare, especially when it's mental health. Women are more affected than men because they need to migrate for work which also influences their family wellbeing [13-15].

Association with physical illness

Mental health is closely related to physical health. Impoverished health can impact mental health. As physical health is closely associated with climate change, anxiety and depression should be diagnosed and treated with good care [16,17].

Prevention

As the temperature rises, there should be measures taken to reduce the mental health effects of climate change.

- There is a growing global view of the need to reduce carbon emissions per person over the coming decades and bridge the inequalities between rich and poor countries [18].
- Plantation of trees and saplings can reduce stress and promote a sense of well-being [19].
- Farmers should get a subsidiary so that they can manage their family during droughts.
- There should be a reduction in emissions of greenhouse gases in the atmosphere to improve health [20].
- Fundamental rights of individuals should be guaranteed by governments - clean air, healthy drinks, enough food, and safe shelter [21].

Efforts taken by NGOs

- Planting and preserving trees countrywide.
- Increasing the number of native trees.

- Bringing green awareness (including compost making, seed collection, water, and waste management among local communities and school children [22].

Efforts to be taken by the health sector for climate change

- Risk maps should be developed for climate-sensitive diseases for each geographical area [23].
- Case studies and research approaches should be conducted to enhance health in climate-sensitive locations [24].

Efforts to be taken by the people to impact global climate change

- Promoting the use of public transportation, walking, and cycling as an alternative to private vehicles
- Usage of E-vehicles and replacement of older vehicles timely [25].

Efforts taken by the government

- The Indian government's plan to deal with the issue of climate change is documented by The National Action Plan on Climate Change (NAPCC) [26].
- They have 8 missions to reduce the impact of climate change [26].

Recommendations

- Don't cut the trees, instead of plant trees and samplings every year to promote mental well being
- Changing practices of agriculture around the world.
- Renewable energy resources should be used in our homes.
- Promote community-based interventions that support the vulnerable groups of mental health.
- Create awareness and education for families about the risks of climate change and mental health and how to overcome the same.
- The government should implement policies for climate change and form a surveillance team for monitoring and evaluating the policy.

Conclusion

Climate change is expected to cause mental health problems in many ways. It causes far-reaching psychological consequences

like anxiety, Depression, and Post-traumatic stress disorder [27]. It affects mental health in direct and indirect pathways [28]. Global commitments are needed to mitigate and reduce the impact of climate change [29].

Efforts to increase access to mental health services and reduce the impact of climate change on mental health should be implemented. Mental health should also get recognized as a physical illness [30].

The government efforts should be implemented in a good way so that the effects of climate change reduce and alternatives like cycling and walking should be preferred by the people over cars and bikes. More research should be implemented on the impact of climate change on mental health so that this issue is addressed.

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